**Dissonant Edges:**

**Exploring the intersection of adult development theory,**

**transformative learning theory, and**

**intercultural competency development**

**Independent Study**

**Fall 2024**

Stephanie Mikulasek

PhD Student, International Education/Education Leadership (IEEL)

College of Education and Human Development

George Mason University

Key words: adult development theory, transformative learning theory, intercultural competency, immersion programs, reflection, dissonance, disorienting dilemmas, growth edges

Summary

This paper examines the intersection of **Adult Development Theory (ADT), Transformative Learning Theory (TLT), and Intercultural Competency (IC) development**, arguing that the concept of dissonance serves as a key catalyst for growth in all three domains. While IC development has traditionally been framed as an experiential process, limited research has explored **how adult developmental stages influence intercultural competency development** and the role of dissonance in this process (Kjellström & Stålne, 2017; Mitchell & Paras, 2018; Pfaffenberger, 2005, 2007). Drawing on foundational theories from **Kegan, Cook-Greuter, Torbert, and Berger,** as well as **Mezirow’s** transformative learning theory, this paper explores how immersion experiences, which often introduce culturally dissonance or disorienting dilemmas, align with developmental shifts in meaning-making structures. Dissonance is described as the misalignment of an individual or community’s beliefs, attitudes, norms, and behaviors with other cognitions (Hinojosa, Gardner, Walker, Cogliser, & Gullifor, 2017).

Through a **directly engaged research experience**, the study applies these theoretical perspectives to examine how individuals **navigate dissonance and developmental growth through an immersive experience.** The findings suggest that **intentional exposure to dissonance**, when paired with **structured reflection and facilitated dialogue**, accelerates movement along adult developmental trajectories, fostering deeper intercultural competence. These concepts directly align with Mezirow’s three elements of transformative learning theory: critical reflection, the centrality of experience, and rational discourse. This paper also introduces the concept of **“dissonant edges”**—the developmental threshold where individuals must reconcile conflicting perspectives—as a **pivotal mechanism in both adult learning and IC growth.** Implications for **intercultural education, executive coaching, and leadership development** are discussed, along with recommendations for tailoring IC training to **developmental capacities.** Further research is needed to explore how **different adult developmental stages interact with immersion-based learning and the sustainability of intercultural transformations over time.**

Reviewing Intercultural Competency

In a seminal study among North American university officials, Deardorff (2006) identified three core components of what we mean by “intercultural competency”: attitudes, such as respect, openness, curiosity, and discovery; knowledge, including self-awareness, cultural, and historical knowledge; and skills, such as listening, observing, evaluating, analyzing, and interpreting. Similarly, Major, Munday, and Winslade (2020) describe intercultural competency (IC) as a “process of ongoing learning through critical reflection to develop knowledge, attitudes, skills, and behaviors that enhance our ability to negotiate successful intercultural relationships” (p. 162). Elsewhere, Cushner (2011) defines IC as the “capacity and ability to enable people to be successful with a wide range of culturally diverse contexts” (p. 206). Still others like Paras, Carignan, Brenner, Hardy, Malmgren and Rathburn (2019) use Vande Berg’s development framework to explain IC as a process of “cultivating cultural self-awareness, development awareness of others, managing emotions, and bridging cultural gaps” (p. 24).

While definitions may slightly differ, the development of IC is generally understood as a continual process involving multiple intercultural experiences leading to an evolving transformation in worldview structure and perspective (Deardorff, 2006; Hammer, Bennett & Wiseman, 2003; Parkhouse, Tichnor-Wagner, Cain & Glazier, 2016). Assessing an individual’s degree of IC typically is identified through the Intercultural Development Inventory (IDI), a cross-culturally valid, reliable measure of intercultural competence. Developed by Milton Bennett (1993), the IDI assesses the extent to which individuals experience cultural difference. Bennett (1993) created the IDI to provide a framework for understanding how individuals construe cultural differences and to guide intercultural training and development. The IDI is grounded in Bennett’s (1986, 1993) Developmental Model of Intercultural Sensitivity (DMIS), which asserts that as individuals’ experience with cultural difference evolves, they move through a range of cognitive orientations.

For the purposes of a later discussion in this paper, a deeper explanation of the five developmental orientations identified in the IDI is helpful; these include: Denial, Polarization (Defense/Reversal), Minimization, Acceptance, and Adaptation (Bennett, 1993).

* **Denial**is the orientation in which individuals do not perceive or acknowledge cultural differences and will likely avoid or withdraw from cultural differences.
* **Polarization** is a dualistic, “us versus them” mindset where cultural differences are acknowledged and evaluated. Defense is the orientation in which one’s own culture is experienced as superior while other cultures are viewed negatively. Reversal is the orientation in which another culture is viewed as superior to one’s own.
* **Minimization** is the orientation in which cultural differences are acknowledged, but the emphasis is placed on the commonality of all people. Individuals with a Minimization mindset may believe that universal values and principles are more important than cultural differences (“we’re all the same” is a common inference).
* **Acceptance** is the orientation in which individuals recognize and appreciate cultural differences, including their own, and likely demonstrate curiosity about other cultures and remain open to learning from them.
* **Adaptation** is the orientation in which individuals can shift their perspectives and behaviors in culturally appropriate ways. Individuals at Adaptation have a repertoire of intercultural skills that enable them to effectively navigate across cultures.

These orientations range from more monocultural mindsets to intercultural mindsets.  Individuals or communities characterized with Denial, Polarization and Minimization tendencies are identified as having a monocultural mindset, that is, when a culture is rejected or minimized; those associated with acceptance and adaptation recognize the differences, curiosity, perspectives, and behaviors within cultural engagements, and are described as having an intercultural mindset. The following graph illustrates this distinction:

|  |  |
| --- | --- |
| **Mindset** | **Orientation** |
| Monocultural | Denial → Polarization (Defense/Reversal) → Minimization |
| Intercultural | Acceptance → Adaptation |

The Intercultural Development Inventory (IDI) has been used extensively in research across various fields. For example, Paige, Jacobs-Cassuto, Yershova, and DeJaeghere (2006) utilized the IDI to evaluate the effectiveness of a year-long intercultural service-learning program, demonstrating how the IDI can provide empirical evidence of developmental shifts in intercultural competence. Separately, when exploring the relationship between intercultural competence and leadership effectiveness, Hammer (2011) investigated the link between leaders' IDI scores and their ability to lead diverse teams, highlighting the practical applications of the IDI in organizational settings. In addition, researchers such as Anderson, Lorenz, & Goh (2016) and Cushner (2011) have used the IDI to assess the intercultural competence of students participating in study abroad or faculty-led immersion programs, providing insights into how these experiences contribute to intercultural development.

While these and other examples illustrate the IDI's versatility as a research tool for measuring and understanding intercultural competence development, what is not well answered is the process of *how* to develop intercultural competency (Mitchell & Paras, 2018). Brendel, Aksit, Aksit and Schrufer (2016), Cushner (2009), and Santoro (2014) reiterate the importance of direct personal engagement with another people and context, that is, another culture, to build intercultural competency. In this regard, an oft-cited vehicle to develop intercultural competency is the use of direct, in-person experiences such as participation in international immersion programs, which can accelerate the development of intercultural competency if such a program is intentionally designed, implemented explicitly to meet that objective, and incorporates active reflection (Che, Spearman, & Manizade, 2009; Cushner, 2012; DeJaeghere & Cao, 2009). Immersion programs offer a unique, in-person forum to shift paradigms, ways of thinking, perceptions of normal, and sense-making that can have significant effect on participants’ competency and capacity to engage effectively with other cultures (Dunn, Dotson, Cross, Kesner, & Lundahl, 2014; Raptis, 2019; Ritz, 2011; Sharma, Phillion & Malewski, 2011). Bennet (1993), Byram (1997), Deardorff (2006) and Hammer, Bennett, and Wiseman (2003) note that immersion programs can move participants to a new way of being and knowing – that is, a transformed ontology that facilitates the recognition and value of other epistemologies, and subsequently accepting, adapting, and integrating knowledge, skills, and attitudes of intercultural competencies.

With this brief overview of intercultural competency development and how it is measured, we now turn to adult development theory.

Exploring Adult Development Theory

Jean Piaget (1970) is often credited as establishing the principal foundations to adult development theory, whose work is cited by theorists such as Lawrence Kohlberg (1981), Robert Kegan (1982), and Susanne Cook-Greuter (1999). While Piaget’s (1950) research primarily focused on **cognitive development in children**, Piaget was the first to propose that cognitive development occurs in qualitatively distinct **stages**that reflect increasingly complex ways of understanding and interacting with the world (Piaget, 1970). These stages, he asserted, serve as a framework for understanding growth (Piaget, 1950). Piaget emphasized that cognition evolves as we interact with and adapt to our environment, which he refers to as assimilation and accommodation. A**ssimilation occurs when we seek to fit** new experiences into existing frameworks (Piaget, 1950) while a**ccommodation is the act of c**hanging existing frameworks to incorporate new experiences (Piaget, 1970). These adaptive processes reflect the dynamic interplay between an individual and their environment, enabling lifelong growth (Piaget, 1970), a core tenet of adult development theory that later researchers used to explore **post-formal stages** in adulthood (Kegan, 1982; Commons, Trudeau, Stein, Richards, and Krause, 1998).

Several adult development theorists built on Piaget’s evolving stages to explore adulthood as a continuation of growth rather than as an achieved plateau (Loevinger, 1976), or as Erikson (1950) suggested, to understand psychosocial development across a lifespan. One theorist, **Lawrence Kohlberg** (1981), paralleled Piaget’s cognitive stages by developing stages of moral development and ethical reasoning. **Robert Kegan** (1982) and Bill Torbert (2000) expanded Piaget’s framework to include emotional and relational dimensions, describing the evolution of adult meaning-making. **Michael Commons** (1998) and his Model of Hierarchical Complexity, extended Piaget’s work to describe how adults tackle increasingly complex problems in various domains, such as leadership, ethics, and systems thinking. Levinson (1978) complemented this work by conceptualizing the “Seasons of a Man’s Life” theory, which mapped out a series of developmental stages and transitions in adulthood. For the purposes of this paper, and in advance of a discussion on the direct application of adult development theory, four adult development theorists merit a deeper analysis: Cook-Greuter, Torbert, Kegan, and Garvey Berger.

Cook-Greuter’s (2004) Ego Development Theory was built on Loevinger’s Ego Development Theory (1976), which offered a framework for understanding psychological development across stages, emphasizing the growth of ego, self-awareness, and moral reasoning.

While Loevinger focused on moral and ego development, Cook-Greuter (2004) extended this work to integrate higher levels of consciousness, including spiritual and post-rational perspectives, to describe increasingly complex ways of making meaning and interacting with the world well beyond Piaget’s formal operational stages. Cook-Greuter (1999, 2005) describes three broad tiers of adult development, with multiple stages in each:

* Pre-Conventional: Focused on immediate needs and self-preservation, such as:
  + Impulsive: Basic survival and self-gratification dominate.
  + Self-Protective: Rules are followed to avoid punishment.
* Conventional: Focused on belonging, norms, and group identity.
  + Conformist: Adheres to societal norms, seeks approval.
  + Self-Aware: Recognizes personal feelings and others' perspectives.
  + Conscientious: Prioritizes internalized principles, responsibility, and achievement.
* Post-Conventional: Focused on systems thinking, multiple perspectives, and integration.
  + Individualist: Sees the relativity of systems and norms; values self-expression and authenticity.
  + Strategist: Able to integrate multiple systems and long-term thinking, focuses on transformation.
  + Construct-Aware: Understands the constructed nature of reality and one’s own ego structures.
  + Unitive: Deep interconnectedness with all things; egoless and transcendent.

In the application of this theory, Cook-Greuter (1999) begins with evaluating where an individual or group might fall on the developmental spectrum by reflecting on how current behaviors, attitudes, and decision-making processes align with these stages. By identifying the appropriate stage, individuals or groups gain an understanding of their current limitations and therefore can take appropriate action on moving toward higher levels of development (Cook-Greuter 1999, 2004). Cook-Greuter (1999) asserts that tailored interventions such as reflection and dialogue; immersion experiences; and systems thinking help individuals or groups shift from one stage to the next.

While Cook-Greuter principally emphasize the psychological stages and implications of adult development theory, other theorists examine the way individuals think as they move through adult development stages, particularly as it relates to leadership. For example, Bill Torbert’s Action-Logics Model (2004) focuses on how individuals interpret and act within the world, particularly in leadership development. Torbert’s (2004) stages, called "Action-Logics," describe how people approach problems, relationships, and goals, which are articulated in several stages, from less to more complex ways of thinking and acting. These stages include:

* Opportunist: Focused on self-interest, sees the world as win/lose.
* Diplomat: Seeks harmony, avoids conflict, and works to fit in.
* Expert: Values logic, expertise, and efficiency; prioritizes being "right."
* Achiever: Goal-oriented and strategic, values effectiveness and delivery.
* Individualist: Questions systems, open to multiple perspectives, creative.
* Strategist: Integrates multiple viewpoints, focuses on long-term vision and systems transformation.
* Alchemist: Embodies systemic thinking, integrates spirituality and transformation, profoundly impactful.

Applying Action Logics begins with self-reflection or guided coaching to determine which Action Logic best represents an individual’s stage (Rooke & Torbert, 2005). For example, if you are an Expert, the focus may be on developing interpersonal skills and valuing input from others. If you are an Achiever, you may consider how systems and long-term goals interplay, and explore broader perspectives. If you are a Strategist, you might engage in mentoring others and designing systems for holistic, sustainable change (Torbert, 2004). As Torbert (2004) explains, these logics can be used as framework to identify dynamics of influence, collaboration techniques, and blind spots. Further, Torbert (2004) emphasizes transformational learning at the organizational level, in which action logics can promote adaptive and innovative cultures.

Turning to Robert Kegan (1994), his **Subject-Object Theory** describes how individuals evolve through increasingly complex stages of meaning-making. A core tenet of Kegan’s work is the idea that growth occurs as individuals move from being "subject to" their experiences—where they are embedded in and shaped by their perspectives—to "making object" those experiences, where they can reflect on and manage them (Kegan, 1994). Kegan (1994) argues this developmental shift is essential for individuals to navigate greater complexity in personal and professional contexts, particularly in leadership and intercultural interactions. Stages of consciousness in the Subject-Object Theory (Kegan, 1994, 2009) include:

* **Imperial Stage:** Individuals focus on self-interest and immediate needs, with limited capacity to understand others' perspectives.
* **Socialized Mind:** Individuals internalize external norms and values, relying on relationships and social structures for identity and guidance.
* **Self-Authoring Mind:** Individuals take ownership of their values and beliefs, developing an internal compass that guides decisions.
* **Self-Transforming Mind:** Individuals recognize the limitations of their own framework and embrace multiplicity and ambiguity, integrating diverse perspectives.

Kegan's Subject-Object Theory both outlines stages of development as well the evolving process of development as individuals navigate the tension between the need for connection and the need for autonomy (Kegan, 1982). This process involves a continuous negotiation between holding on to what is known (equilibrium) and letting go to embrace new perspectives (disequilibrium), a concept that resonates with the idea of "dissonance" as a catalyst for growth in adult development (Kegan, 1982); this point will be expanded later in the paper. Kegan (1982, 1994) argues that development is not just about acquiring more information, but about a fundamental transformation in the way individuals organize and give meaning to their experiences, shifting from a reactive stance to a more proactive and self-reflective one.  Kegan (1994) describes this construct of making sense of the world and experiencing the transformation when sense making shifts as constructive development. He highlights that progression through the stages is not automatic and that individuals may become "stuck" in a particular stage if they lack the necessary support or face environments that do not foster growth (Kegan & Lahey, 2009). Understanding these developmental dynamics is essential, Kegan and Lahey assert (2009), as they inform strategies to effectively support individuals in managing complexity, ambiguity, and change.

Building on Kegan’s contributions and his Subject-Object Theory, Jennifer Garvey Berger applies these concepts to leadership in complex environments. She emphasizes the need for leaders to grow their "vertical development," which involves increasing their capacity to manage complexity, ambiguity, and interconnectedness (Berger, 2012). Berger expands Kegan’s stages of consciousness by exploring how leaders navigate complexity using tools such as:

* Sense-Making: Interpreting complex situations by integrating diverse viewpoints.
* Adaptive Thinking: Shifting between perspectives to manage uncertainty.
* Transformative Conversations: Engaging in dialogue that fosters growth for self/others.

Berger (2012) refers to the edges of development stages as “growth edges,” which represent an uncomfortable or dissonant experience felt in the movement through adult development stages. Outcomes of this movement are a growing self-awareness, capacity to take different perspectives, and the ability to “continuously transform her own system” (Berger, 2012, p. 19). Berger (2012) refers to the developing way of understanding the world as “self-complexity,” also called “forms of mind,” which is the shifting or transforming capacity of humans “to cope with complexity, multiple perspectives, and abstraction” (p. 10). These forms of mind shift along growth edges, which is when new perspective-taking emerges as adults move through development stages of self-sovereignty, socialized, self-authored, and finally self-transforming forms of mind, a slight modification from Kegan’s named stages (Berger, 2012). Integrated within this evolving sense-making are the attitudes and awareness that allow this sense making to effectively, meaningfully, and productively to occur, with curiosity as the “lubricant of the learning process” (Berger, 2012, p. 164). The development of reflection, self-awareness, and perspective-taking are integrally tied to these development phases.

These four adult development theorists tend to differentiate their approaches by particular focus areas. Kegan emphasizes meaning-making, Cook-Greuter focuses on ego development, Torbert on action and leadership, and Berger on complexity in leadership. The application of ADT also differs; Kegan and Berger’s work is highly practical for leadership and learning, while Cook-Greuter’s theory explores higher consciousness. Additionally, these theorists look at relationships differently; Kegan and Berger place strong emphasis on interpersonal dynamics while Cook-Greuter (and her predecessor Loevinger) focus more on internal self-conceptualization and its evolution.

The similarities among these theorists are also evident. For example, Cook-Greuter, Torbert, Kegan, and Berger all articulate developmental models with described stages or levels of growth, moving from simpler to more complex forms of understanding. While the models use distinct terminology (e.g., Subject-Object, Ego Development, Action-Logics), each theorist describes overlapping phenomena, namely the identification of various stages of adult development that may occur over a lifetime based on a particular context and individual. Advanced stages in all models involve recognizing interconnectedness and addressing complexity. These theories also highlight the importance of reflection and self-awareness as drivers of development.

Summarily, adult development theory offers a meta-lens for assessing how increasingly complex sense making occurs for individuals and societies (Kjellstrom and Stalne, 2017). Theorists focus on the stages and process of growth and change that occur throughout adulthood, which generally describe how individuals’ ways of thinking, feeling, and relating to the world evolve. Said another way, adult development theory is learning the skills, knowledge, and attitudes to gain new perspectives, self-awareness, and the traits of curiosity, humility, empathy, and compassion – the necessary elements and foundation of intercultural competency. Returning to the earlier question of how IC and ADT development occurs, we now turn to exploring dissonance.

Exploring Dissonance

Dissonance occurs when “individuals hold two or more cognitions that are contradictory (such that) they will feel an unpleasant state – dissonance” (Hinojosa, Gardner, Walker, Cogliser and Gullifor, 2017). This concept of dissonance most notably grew out of Jack Mezirow’s work, the founder of transformative learning theory. This theory explores how adults experience profound personal and cognitive shifts in their perspectives and worldviews by critically reflecting on their assumptions, beliefs, and experiences (Mezirow, 1978, 2000). Central to Mezirow’s (2000) transformative learning theory are three elements: critical reflection, the centrality of experience, and rational discourse (Baumgartner, 2012).  These elements facilitate perspective transformation, which involves a shift in frames of reference allowing for more inclusive, discriminating, and integrative perspectives that may lead to transformation of perspective or identity (Jones, Rowan-Kenyon, Ireland, Niehaus, and Skendall, 2012; Trilokekar and Kukar, 2011).

Mezirow (2000) identifies the trigger for these shifts as a disorienting dilemma, defined as a significant life event or experience that challenges an individual’s existing worldview. These dilemmas often arise from crises, cultural shocks, or experiences that generate cognitive and emotional conflict, requiring the individual to question long-held assumptions and can then serve as a catalyst for growth and a deepening of transformative learning (Raptis, 2019). Cushner (2011, 2012) and Jones, Rowan-Kenyon, Ireland, Niehaus, and Skendall (2012) reiterate that cultural collisions, or moments when current frames of reference are no longer effective, often create these disorientating dilemmas, or in the adult development theoretical term, dissonance. To navigate through these dilemmas, Mezirow (2000) states that facilitators (such as a coach, educator, and so on) play a key role in guiding learners through disorienting dilemmas and navigating contradictory beliefs or values by creating safe, supportive environments that foster critical reflection and dialogue. The phases of transformation, which Kitchenham (2008) notes is not linear, but rather a dynamic interplay of reflection, action, and dialogue, consists of ten steps (Mezirow, 1991), which are outlined here:

1. A disorientating dilemma
2. Self-examination
3. A critical assessment of assumptions
4. Recognition of shared experience
5. Exploration of options
6. Planning a course of action
7. Acquisition of knowledge and skills
8. Provisional trying of new roles
9. Building competence and self-confidence
10. Reintegration into one’s life with new perspectives

Through this experiential process, the transformative learning process can cultivate qualities such as empathy, social responsibility, emotional intelligence, and complexity (Mezirow, 2000). Allan (2003), Cushner (2011), and Mitchell and Paras (2018) agree, asserting that a dissonant event and subsequent reflection are potential catalysts for deepened self-awareness, adaptation to other cultures, and appreciative understanding. Hinojosa, Gardner, Walker, Cogliser, and Gullifor (2017) add that transformative learning principles can cultivate emotional intelligence and complexity in leaders -- such as faculty or other leaders of immersion experiences.

Most interesting here is that transformative learning theory underlies the development of intercultural competency, which also relies on a disorienting dilemma or dissonance for growth. Cushner (2011) has championed the integration of Mezirow’s (1978, 1991, 2000) transformative learning theory as a way of understanding intercultural competency development through specifically immersion programs. Immersion experiences, which create intentional moments of disorientating dilemmas or “cultural dissonance” (Hubbard and Rexeisen, 2020), can offer a transformational experience of identity (consisting of cognitive, emotional, spiritual, and somatic selves) that can create paradigm shifts in participants (Grant, Green, Rynsaardt, 2010). Further, with repeated exposure to disorienting dilemmas, Chwialkowska (2020) argues immersion programs foster sustainability-oriented mindsets and leads to more profound, cumulative transformations and as Hyde (2012) notes, deeper moral reasoning.

Through this analysis, transformational learning theory describes the profound personal and cognitive change possible in direct, immersive experiences through critical reflection on assumptions and beliefs (Mezirow, 1978, 2000). Adult development theorists have noted the intersection of transformative learning theory, immersion experiences, and adult development theory. For example, Kjellström and Stålne (2017) connect Mezirow’s (1991, 2000) transformative learning theory to adult developmental psychology, demonstrating how perspective transformation aligns with the stages of adult development theory such as Cook-Greuter’s (2004) ego development theory. Cook-Greuter (2004) goes on to suggest that immersion programs provide opportunities for individuals to encounter new perspectives, challenge assumptions, and reflect on their meaning-making frameworks. By challenging participants’ existing worldviews, immersion fosters the transition to higher stages, particularly the Strategist and Alchemist levels, where cultural complexity and diversity are fully embraced (Cook-Greuter, 2004).

Rooke and Torbert (2005) explore how the goals of immersion programs help transition participants to higher-order Action Logics through intentional opportunities that question assumptions (Mezirow, 1991) and spark reflection (Torbert, 2004). Chandler and Torbert (2020) emphasize that immersion experiences challenge participants to operate beyond the Achiever level, cultivating the Strategist or Alchemist Action-Logics. These stages align with the transformational outcomes often sought in intercultural programs, such as adaptability and systems thinking. **Rexeisen, Anderson, Lawton, and Hubbard (2006)** examined study abroad programs and found that immersive intercultural experiences foster perspective shifts that align with Kegan’s developmental trajectory. Similarly, Niehaus and Crain (2013) explored how international service-learning programs cultivate Kegan’s (1994) concept of **Self-Authorship,** enabling students to navigate cultural complexity with greater autonomy and reflexivity, or how exposure to new cultural paradigms often challenges students' **Socialized Mind,** pushing them to reflect critically on their values and assumptions. Such experiences disrupt familiar contexts, requiring participants to reflect on and reframe their cultural assumptions and interpersonal approaches (Niehaus and Crain, 2013). Hicks and Berger (2010) argue that immersion experiences create the conditions for such growth by requiring individuals to confront ambiguity and engage in transformative interactions. Berger’s (2012) emphasis on complexity resonates with Kegan’s later stages of development, particularly the Self-Transforming Mind, as both theories stress the importance of embracing paradox and multiplicity.

With this analysis, the common pivot point of adult development theory, transformative learning theory, and intercultural competency development may be these moments of disorientating dilemmas or dissonance – when meaning making is interrupted – that are often evident in immersion programs. These types of programs, designed to expose students to unfamiliar cultural, professional, or social environments, may therefore create conditions that can accelerate movement through developmental stages, a topic meriting further research. Critical in this discussion is the notion of direct experience. Moving through stages requires personal engagement in a process that may facilitate adult development. If dissonance is the pivot point at which adults move through various stages of sense-making and perspective taking, spawned by crossing through growth edges, how can we analyze this point through an immersive experience? Further, arguably the moment of dissonance is a personal and experienced event. Therefore, the understanding of dissonance as a felt phenomenon must be a first-person and direct experience. From this premise, I engaged in an immersive experience to explore directly how dissonance shows up in an adult development context.

Application of AD Theory

Jennifer Garvey Berger co-founded Cultivating Leadership, a company committed to helping organizations and individuals evolve and manage complexity under their mission of cultivating “leadership that shapes a just, diverse, flourishing, and sustainable planet” (<https://www.cultivatingleadership.com>). Author of *Changing on the Job: Developing Leaders for a Complex World*, Berger has helped advance and expand the adult development theory proposed by Robert Kegan with particular focus on breaking down and assessing meaning making structures to help inform and open possibilities for transformation. Cultivating Leadership offers an introductory course called Conversations on the Edge, the “gateway” course to deepen understanding in adult development theory and to learn how to listen for structures in meaning making.

The course incorporates several tools and practices, including interview observation, during which the instructors provide live demonstrations of interviewing one another or class participants with accompanying commentary on what structures are arising; self-study between class sessions; group-study with assigned peers; observation of others discussing several interview transcripts to practice identifying where and how structures developed; readings; and peer interview practice. Class participants are grouped in triads, which meet biweekly for two to three hours each session. In my case, my triad included a Japanese executive coach currently residing in the United States, and a medical doctor originally from Hungary and now living in Minnesota. We met biweekly from September to November 2024.

In my triad, we reviewed eight written interview transcripts provided by the course instructors. All transcripts were actual interviews held in the past twenty years, and no specific identifying information was available to determine who was interviewed or when or where the interview took place. The interviewee was only identified by gender, general professional area, and first name, although this name may have been a pseudonym. To analyze these transcripts, each student member of a triad individually read the transcript three times, during which the student highlighted key sentences or questions. Every tenth line of the transcript content was numbered to allow for meaningful conversation about specific sections. The triad then met as a group, during which each student shared observations and areas highlighted in response to the instructions provided for a particular exercise. The triad then summarized those observations, discussed any areas of non-alignment, and identified a suggested stage of adult development as defined by Berger’s research. After the triads concluded their work, the entire class met to discuss observations and specific areas highlighted while the instructors noted different points to consider.

For example, three of those transcripts included interviews with interviewees named Kathleen, Gretchen, and Alan. During one exercise, students were asked to highlight questions asked by the interviewer that seemed to push the boundaries of meaning making structures for the interviewee. By examining the questions, we could learn how an interviewer probed for limits on meaning making, that is, how an interviewee thought of their current situation, what possibilities may be available, and where limits may be in their response to addressing the situation. Limits were indicative of a growth edge, at which dissonance, or cognitive misalignment, was experienced. To illustrate this exercise, below are brief excerpts from each of these interviewees. The words highlighted reflect our triad’s collective opinion about what was important in that particular section. Please note the capitalized sentences reflect the interviewer while the normal punctuation represents the interviewee. To begin, the first excerpt is the interview with Kathleen, who is responding to the interviewer’s question of whether Kathleen would be willing to go back to her former employer:

*SO DO YOU HAVE AN IDEA OF WHAT YOU WOULD TAKE? WHAT THEY COULD OFFER YOU THAT WOULD FEEL GOOD?*

*No. No, I know that ...I know that I have loved being appreciated for who I am. And being able to work on a whole person level. And ...*

*WHICH FEELS NEW IN THIS POSITION THAT YOU ARE NOW?*

*130 Absolutely, absolutely. Yeah. And you know, that’s all I'm interested in now. So I feel like I...the other just ...it just doesn’t have anything to offer me. It’s just done.*

These questions were probing how Kathleen structured her thinking about a potential return to her former employer. The subject of discussion is less important than how she is thinking about the subject. Here, interesting to the Triad was that her response was not concerned with salary or a particular position, that is, a particular functional aspect about the job. Rather, Kathleen focused on a broader consideration, emphasizing a desire to bring her “whole person” to her work. When asked to compare how she feels in her current position, Kathleen noted that the past way of working was “just done,” a sentiment not grounded from an external metric but instead rooted in her internal, self-determined perspective of what was important to her. From an adult development perspective, it appears Kathleen was defining what was important to her, which would be akin to a self-authoring stage according to Berger (and by extension Kegan), and as it became evident throughout this interview, perhaps a tilt to self-transformation as she emphasized a larger sense of self (whole person).

A second example was the interview with Gretchen, who was discussing her written work as a teacher:

*I WAS STRUCK BY YOUR SAYING THAT I AM A GOOD WRITER AND I AM SMART AND WONDER HOW THAT THEN FITS IN WITH WHAT YOU’RE SAYING ABOUT THE EVALUATIONS COMING FROM OTHER PEOPLE. LIKE HOW DO YOU KNOW YOU’RE A GOOD WRITER AND THAT YOU’RE SMART?*

*I don’t know. Well, how do I know that I’m a good writer [YEAH] and that I’m smart? Because, well, because I do know. I mean I have…I have great GREs. I always…whenever I feel like I’m stupid I pull out me GREs and just think about that. Look at those GREs. Would a stupid person get those GREs? Of course not. So there are kind of, there are those kinds of things. But I also know that I understand things, I mean as well as, if not better than, some people. That I can make, that I make good observations, say in class that other people don’t necessarily make. I mean you can…relative to other people I think, Gee, I can pick up on things. I understand things. So I am smart, you know? But then you have those days where like you don’t understand anything your supervisor says and your supervisor tears apart a set of process notes. And I, and then all of a sudden I hear myself saying you, it’s me. It’s that I have those days where the supervisor does this and that convinces me that maybe I’m not as smart as I think I am. There are those days where I can understand but if I were really smart why couldn’t I understand all the time.*

*SO YOUR SUPERVISOR MAKING A CRITICAL COMMENT TO YOU LEADS YOU TO CALL INTO QUESTION [right] THIS BELIEF YOU HAVE THAT YOU ARE SMART AND CAN DO THINGS. [yeah, yeah.] AND THEN HOW DO YOU GO ON FROM THERE? WHAT GOES ON*

*Ah, okay, well, let’s, let me think now.*

In this case, Gretchen seems to be grappling with how she makes meaningful assessments about her competence. The interviewer begins by setting up the dichotomy: on the one hand, Gretchen’s meaning making structure dictates that she has determined her abilities, but on the other hand she had indicated a reliance on evaluations (from her supervisor) to inform her whether she is a competent writer. The structure of her response reflected her conundrum: how does she determine her beliefs about herself. The interviewer’s follow-up question repeats this struggle, to which Gretchen concurs, and then the interviewer pushes the question further by asking her what happens next – how Gretchen proceeds with this internal struggle of possibly the adult development stage of socialization, an interdependence on determining oneself based on others’ opinions, to a self-authored stage of development, which means the individual determines their metric. Based on this brief excerpt, it appears Gretchen is at the socialized stage of adult development according to Berger, but is gaining awareness of the possibility of self-authorship.

A third example is the interview with Alan. The interviewer is talking with Alan about a construction contract he recently oversaw as part of this employment (some words are in a different language):

*AND WHAT WAS THE GREATEST SENSE OF ACHIEVEMENT IN THAT?*

*That we finally had a fence that was finished to the standard at the cost.*

*AND HAVING IT DONE TO STANDARD, TO COST, AGAINST ALL OF THE ODDS…*

*Yes. And still having faith in the runanga and with the people that built it even though we were at logger-heads for a long, long time, you know, we’re still on talking terms and it never got quite to the point where we’re going to take them to court and I threatened it a couple of times that they weren’t going to do the job to the standard and holding payments back. Oh, it was a nightmare, it was a nightmare but at the end of the day it worked well.*

*THEY COULD SEE THAT THE WORK WASN’T TO STANDARD?*

*Yes. We did get into one conflict where we had an independent fencer come up, to mediate, really. It was mediation.*

*AND WHAT WAS THE HARDEST PART OF DEALING WITH ALL OF THAT? The hardest part was dealing with local people who were prepared to accept a lower standard than what I was, than what we had negotiated originally and that they were tangata whenua and that they owned this land and if they were prepared to accept it, why wouldn’t I?*

*SO WHAT WAS REALLY HARD ABOUT THAT?*

This excerpt demonstrates the value of asking the same question repeatedly. Additionally, these questions reflect the “superlative” nature of questions asked to help push the boundaries of meaning making. When asked a question at least three times (what was the hardest part, or what was the best part) again and again, the interviewee is pushed to move beyond a superficial response and challenged to consider the deeper issue driving their response. The repetitive nature of the question thus has the effect of discovering where the boundaries of reflection, self-inquiry, and perspective may be for Alan. Importantly, this manner of questioning is not indicative of judgment of Alan’s development; rather, it is a tool to reveal to the interviewer and interviewee the complexity of the current meaning making system, and what subsequent questions may be useful to help the interviewee navigate through the felt dissonance as those limits are discovered. Based on this short excerpt, it appears Alan is on the socialized stage of development.

Participating in an experience that provided direct engagement with the occurrence of dissonance and identifying the limits of an individual’s current stage of adult development led to four key observations. First, the utilization of superlative questions (e.g. what was the hardest, most important, most difficult thing) revealed the limits/edges of the individual’s frame of reference. This process pushed the interviewee to think more deeply about his or her “why,” and each time the question asked, the subject was narrower than the earlier question (e.g. “what was hardest about ‘that’”; and “so what was hardest about that thing,” etc). Second, the use of open-ended questions, such as “share more about that,” or “tell me more about this,” helped the interviewee continue to explore his or her thinking and reflection. Third, another tool to identify the limits or boundaries of meaning making were on possibilities and exceptions, such as “is there a possibility of x or y to happen? Could there be a scenario where this would not be the case?” Fourth, the use of binary questions specifically aligned with a particular development stage offered a final confirmation or validation. Such questions may be, “are you thinking along these lines (describing a socialized mind) or more along those lines (describing a self-authoring mind)?

We now turn to a discussion of this paper’s analysis and directly engaged experience of some of the theories presented.

Discussion

The intersection of **Adult Development Theory (ADT), Transformative Learning theory (TLT), and Intercultural Competency (IC) development** suggests that meaningful shifts in how individuals engage with cultural complexity occur at the **edges of their cognitive, emotional, and epistemological frameworks** (Kegan, 1994; Berger, 2012; Mezirow, 2000). As outlined earlier, **dissonance can serve as the catalyst to spark these shifts in both adult development and intercultural growth**, particularly when individuals are immersed in environments that challenge their existing ways of making meaning (Kegan, 1994; Mezirow, 2000; Cushner, 2011). Transformative learning theory (Mezirow, 2000) provides an explanatory framework for **how** this developmental shift occurs. Mezirow’s **transformative learning theory** is predicated on the occurrence of **disorienting dilemmas**, which mirror the **dissonant edges** identified in ADT. These dilemmas require individuals to **critically reflect on previously unquestioned assumptions**, leading to new, more inclusive perspectives. As noted by **Mitchell and Paras (2018)**, the **"engine" of intercultural learning** lies in these moments of dissonance, where individuals must reconcile their **internal meaning-making structures with external cultural realities**. This dissonance can manifest in various ways, such as **language barriers, differing social norms, conflicting values, or unfamiliar emotional responses**, all of which require cognitive and emotional adaptation (Mezirow, 2000; Niehaus & Crain, 2013). As these dissonant moments signify that an “edge” of development or intercultural competency has been discovered, I propose a modification of Berger’s (2012) term of “growth edges” in her discussion on ADT and instead offer “dissonant edges” to more clearly represent the trigger that has led to that “edge” of development – either in ADT or IC.

I**mmersion experiences can drive dissonance edges and the integration of new perspectives**, thereby serving as **powerful developmental accelerators.** Through this **direct engagement with structured immersive (and by extension intercultural) experiences**, individuals may be forced to confront their assumptions, leading to the kind of **disorientating dilemmas** that sparks adult development. As Deardorff (2006) and Cushner (2011) reiterate, the process of **developing intercultural competency is more than an accumulation of knowledge about other cultures; it involves a fundamental shift in cognitive complexity and meaning-making structures**.

Research on **immersion-based learning programs** substantiates the argument that these experiences facilitate **deep developmental change**. Rexeisen et al. (2006) found that students who participated in study abroad programs experienced **significant shifts in their cognitive complexity and intercultural adaptability**. Niehaus and Crain’s (2013) work on **service-learning programs** supports this developmental trajectory, finding that **students who engage in well-structured intercultural immersions often progress toward Self-Authorship**, particularly when given opportunities for **critical reflection and facilitated dialogue**. Similarly, Cushner (2011) and Deardorff (2006) have emphasized that **intercultural competency cannot be effectively developed in isolation**; rather, it requires **sustained, intentional exposure to cultural complexity – when a dissonant edge arises – paired with structured opportunities for reflection and meaning-making**.

***The Role of Reflection in Developmental Growth***

**Reflection emerges as the key mediator in this developmental process** (Mezirow, 1991; Berger, 2012; Cushner, 2011). Without **intentional opportunities for reflection**, the experience of dissonance may result in **defensive reactions or regression** rather than growth (Kegan, 1994; Rexeisen et al., 2006). **Mezirow (2000) identifies three levels of reflection—content, process, and premise reflection—each of which plays a role in transforming perspectives**. Similarly, **Cook-Greuter’s (2004) post-conventional development stages** and Kegan’s (1994) and **Berger’s (2012) development stages** indicate that transformation occurs when individuals **question their assumptions shaping their understanding of themselves and others**.

As demonstrated in the **Conversations on the Edge** experience, **structured reflection tools—such as questioning strategies, dialogue, and peer debriefing—can accelerate adult development** by **identifying, probing, and working through dissonant edges**. Through **triadic discussions and transcript analysis**, participants engaged in a process that closely mirrors **the transformational mechanisms described by Mezirow and Kegan**. The **structured use of questioning techniques**—including **superlative questions, binary contrasts, and perspective-shifting probes**—allowed participants to identify the **boundaries of their current meaning-making systems**. Within the context of intercultural competency, this means that **without structured reflection, individuals may default to their existing cultural frameworks, reinforcing rather than challenging their biases** (Hammer, 2011). Further, these interactions demonstrated that **the ability to critically reflect on one’s own assumptions is a skill that can be cultivated through intentional practice**, reinforcing the assertion that **IC development is not merely an outcome of cultural exposure but an intentionally learned function through guided facilitation and cognitive rethinking** (Berger, 2012; Kitchenham, 2008).

***From Socialized to Self-Transforming Mind: The Role of Immersion Experiences***

Kegan’s **Subject-Object Theory (1994, 2009)** provides a **useful developmental lens** through which to understand how immersion programs catalyze intercultural growth. His model suggests that as individuals progress from **Socialized to Self-Authoring to Self-Transforming Minds**, they become **more capable of engaging with cultural complexity, ambiguity, and paradox**—all key competencies of intercultural engagement (Deardorff, 2006; Cushner, 2011). Examples of how ADT and IC intersect may be described is as follows:

* **Socialized Mind:** At this stage, individuals conform to external norms and derive their sense of identity from their cultural environment. Intercultural interactions may be filtered through **a lens of in-group/out-group distinctions**, which aligns with **Bennett’s (1993) Denial and Defense orientations in DMIS**. Immersion at this stage may result in **culture shock** rather than transformation unless guided by reflective facilitation.
* **Self-Authoring Mind:** Here, individuals begin to **internalize their own values, beliefs, and frameworks**, allowing them to **navigate intercultural experiences with greater autonomy**. They recognize that culture is **not absolute but constructed** and can hold multiple perspectives simultaneously. This aligns with **the Acceptance and Adaptation phases of DMIS**, where individuals gain **intercultural empathy and adaptability** (Hammer, 2011).
* **Self-Transforming Mind:** The most advanced stage, where individuals **fully integrate diverse cultural perspectives into their own evolving worldview**. They **embrace complexity, hold contradictory truths, and actively engage in ongoing transformation**. This corresponds with **Cook-Greuter’s (1999) Unitive Stage** and **Torbert’s (2004) Alchemist Action-Logic**, both of which describe individuals who are capable of deep **systems thinking, intercultural fluidity, and transformational leadership, all of which align with the Adaptation phase (Hammer, 2011)**.

A particularly salient finding from this study is that **adult developmental stage may influence how individuals engage with intercultural experiences**. Individuals at **earlier developmental stages (e.g., Socialized Mind, Expert Action-Logic)** may exhibit **resistance or defensiveness** when confronted with dissonant cultural perspectives, whereas those at **later stages (e.g., Self-Authoring Mind, Strategist Action-Logic)** demonstrate **greater capacity for perspective-taking and integrative thinking** (Torbert, 2004; Kegan, 1994). This observation aligns with research by Hicks and Berger (2010), who argue that **intercultural immersion experiences are most effective when they are developmentally matched to participants’ cognitive capacities**. If an individual lacks the **cognitive complexity to integrate multiple cultural perspectives**, they may experience **cultural dissonance as overwhelming rather than transformative**. This suggests that **IC training programs should be scaffolded to support individuals at different developmental levels**, a notion that warrants further research.

Further, the **role of facilitation and reflection in guiding developmental progress** is essential. As Kegan and Lahey (2009) assert, developmental shifts are **not automatic**; they require **intentional support structures** that provide the tools for individuals to **navigate and integrate dissonance constructively**. In the **Conversations on the Edge course**, facilitators employed **reflective dialogue techniques** to help participants **externalize and analyze their assumptions**, echoing the structured approach recommended by transformative learning theorists (Mezirow, 2000; Kitchenham, 2008). This aligns with the findings of Rooke and Torbert (2005), who emphasize that **transformational learning in leadership contexts relies on the ability to make explicit the underlying frameworks that shape one’s decision-making**.

***Toward a Model of Developmentally-Informed Intercultural Learning***

The implications of these findings extend beyond **academic theory** and into the **design of intercultural education programs, leadership development initiatives, and global competency training**. If IC development is understood through an **ADT and TLT lens**, then it follows that **traditional approaches to cultural competency training—such as lectures or basic cross-cultural comparisons—are insufficient**. Integrating these insights, a developmentally-informed model of intercultural competency development should consider three core elements:

* **Intentional Exposure to Experiential Dissonance:** Immersion experiences must be **designed to challenge existing meaning-making structures** by placing individuals in **cognitively and emotionally disorienting situations** (Mezirow, 2000; Kegan, 1994).
* **Structured Reflection and Meaning-Making:** Programs should **incorporate guided reflection**, using **questioning techniques, peer debriefing, and facilitated coaching** to help individuals process their experiences and recognize shifts in their perspectives (Berger, 2012; Cushner, 2011).
* **Developmentally Tailored Interventions:** Recognizing that individuals **engage with intercultural complexity differently depending on their developmental stage**, training should be **adapted to match participants' cognitive capacities,** ensuring that **intercultural learning is neither too simplistic nor too overwhelming** (Torbert, 2004; Cook-Greuter, 2004).

By aligning **Adult Development Theory, Transformative Learning Theory, and Intercultural Competency models**, educators and practitioners can **more effectively design immersion programs that foster deep, sustainable transformation**. This approach moves beyond surface-level exposure to culture and instead focuses on **the cognitive and emotional shifts necessary for individuals to become adaptive, globally competent leaders** (Deardorff, 2006; Kegan, 1994; Berger, 2012).

Areas of Future Research

While this study has arguably established strong theoretical and practical linkages between Adult Development Theory and Intercultural Competency, several key areas warrant further research.

1. Developmental Stages and Intercultural Learning Trajectories – Future research should investigate how individuals at different stages of adult development engage with and benefit from intercultural immersion experiences. Are participants at earlier developmental stages (e.g., Socialized Mind, Expert Action-Logic) more likely to experience resistance to dissonant experiences? Conversely, are those at later stages (e.g., Self-Transforming Mind, Alchemist Action-Logic) more likely to integrate and sustain developmental shifts post-immersion? Pederson (1997), for example, discovered that K-12 students demonstrated greater intercultural sensitivity compared to their teachers and teacher candidates; we do not have information on the adult development stage of the teachers, which would be an interesting subsequent research area.
2. Longitudinal Impact of Immersion Programs – While existing studies (e.g., Rexeisen et al., 2006; Cushner, 2011) suggest that intercultural immersion can lead to transformative outcomes, few have examined the long-term developmental effects of these experiences. Research should assess how participants' meaning-making structures evolve months or even years after completing immersion programs.
3. Facilitation and Coaching Strategies – Given the demonstrated role of structured reflection in fostering developmental shifts, future research should explore how coaching and facilitation methods (e.g., superlative questioning, guided reflection, adaptive learning models) can be optimized to support intercultural competency development.
4. Intersection of Adult Development and Cultural Identity Formation – A deeper investigation into how adult development theory applies to cultural identity formation could provide insight into how individuals navigate dual or multiple cultural identities in an increasingly interconnected world.
5. Role of Dissonance -- How might adult development theory and its recognized moments of dissonance help inform the development of intercultural competency and the associated transformative learning theory concept of disorientating dilemmas?

By expanding the research in these areas, scholars and practitioners can refine how intercultural competency programs are designed, facilitated, and assessed to maximize developmental impact.

Conclusion

The convergence of adult development theory, transformative learning, and intercultural competency (IC) development forms a rich tapestry for understanding how individuals grow through dissonant experiences. Adult development (AD) theorists such as Kegan (1994), Cook-Greuter (2004), Torbert (2004), and Berger (2012) have demonstrated that growth occurs when individuals are challenged to confront and reframe their meaning-making structures. This discussion synthesizes these perspectives with evidence from immersive, directly engaged activities to argue that intentional dissonance—in the form of challenging intercultural experiences—serves as a critical catalyst for transformative learning.

The synthesis of these theoretical and practical insights underscores a critical point: the development of intercultural competency seems to be deeply intertwined with the processes of adult development and transformative learning. The dynamic interplay between dissonant experiences, reflective engagement, and the evolution of meaning-making structures forms the backbone of effective intercultural education. As adults confront the challenges of cultural difference, their ability to engage in deep self-reflection and to adapt their internal frameworks becomes a decisive factor in determining the quality and sustainability of their intercultural competence. This observation calls for a reassessment of traditional approaches to intercultural training—one that places equal emphasis on experiential engagement and the development of reflective capacities.

As institutions increasingly recognize the value of intercultural competency in a globalized world, the integration of AD-informed methodologies into curriculum design offers a promising pathway for enhancing overall learning outcomes. Educational programs that deliberately incorporate immersion experiences and reflective dialogue can potentially foster not only immediate competency gains but also long-term developmental change. This dual impact supports the argument that intercultural competency is not merely a set of discrete skills but rather an evolving developmental process that benefits from the structured challenges and supports provided by immersion experiences (Deardorff, 2006; Paras et al., 2019).

In summary, the discussion presented here demonstrates that the integration of adult development theory, transformative learning, and immersive intercultural experiences provides a comprehensive framework for understanding how individuals grow in the face of cultural dissonance. The evidence suggests that when individuals are supported through structured, reflective engagement, they are more likely to experience transformative shifts in their meaning-making processes, thereby achieving higher levels of intercultural competency. This integrated approach offers a robust model for future program design and research, one that can inform both theoretical development and practical applications in diverse educational and professional contexts.

**References**

Allan, M. (2003). Frontier crossings: Cultural dissonance, intercultural learning, and the

multicultural personality. Journal of Research in International Education, 2(1), 83–110. https://doi.org/10.1177/1475240903021005

Allen, D. M., Rosch, E., & Riggio, R. E. (2022). Advancing leadership education and

development: Integrating adult learning theory. Journal of Management Education, 46(2), 252–283. https://doi.org/10.1177/10525629211008645

Anderson, P. H., Lorenz, K. M., & Goh, M. (2016). Measuring the impact of study abroad on

intercultural competence: An institutional case study. International Journal of Intercultural Relations, 54, 1–14.

Bachkirova, T. (2009). Cognitive-developmental approach to coaching: An interview with

Robert Kegan. Coaching: An International Journal of Theory, Research & Practice, 2(1), 10–22. https://doi.org/10.1080/17521880802645951

Baumgartner, L. (2012). Mezirow’s theory of transformative learning from 1975 to present. In E.

Taylor & P. Cranton (Eds.), The handbook of transformative learning: Theory, research, and practice. Jossey-Bass.

Bennett, M. J. (1993). Towards ethnorelativism: A developmental model of intercultural

sensitivity. In R. Paige (Ed.), Education for the intercultural experience (pp. 21–71). Intercultural Press.

Berger, J. G. (2002). Exploring the connection between teacher education practice and adult

development theory (Doctoral dissertation). ProQuest Dissertations Publishing.

Berger, J. G. (2004). Dancing on the threshold of meaning: Recognizing and understanding the

growing edge. Journal of Transformative Education, 2(4), 336–351. https://doi.org/10.1177/1541344604267697

Berger, J. G. (2012). Changing on the job: Developing leaders for a complex world. Jossey-

Bass.

Berger, J. G. (2019). Unlocking leadership mindtraps: How to thrive in complexity. Stanford

Briefs.

Berger, J. G., & Atkins, P. W. B. (2009). Mapping complexity of mind: Using the subject-object

interview in coaching. Coaching: An International Journal of Theory, Research & Practice, 2(1), 23–36. https://doi.org/10.1080/17521880902780989

Brendel, N., Aksit, F., Aksit, S., & Schrufer, G. (2016). Multicultural group work on field

excursions to promote student teachers’ intercultural competence. Journal of Geography in Higher Education, 40(2), 284–301. https://doi.org/10.1080/03098265.2016.1140731

Byram, M. (1997). Teaching and assessing intercultural communicative competence.

Multilingual Matters.

Che, S. M., Spearman, M., & Manizade, A. (2009). Cognitive and emotional development

through dissonant experiences in less familiar destinations. In R. Lewin (Ed.), The handbook of practice and research in study abroad (pp. 151–169). Routledge.

Commons, M. L., Trudeau, E. J., Stein, S. A., Richards, F. A., & Krause, S. R. (1998).

Hierarchical complexity of tasks shows the existence of developmental stages. Developmental Review, 18(3), 237–278.

Cook-Greuter, S. R. (1999). Postautonomous ego development: A study of its nature and

measurement (Doctoral dissertation). Harvard Graduate School of Education.

Cook-Greuter, S. R. (2004). Ego development: Nine levels of increasing embrace. Cook-Greuter

& Associates.

Cushner, K. (2009). The role of study abroad in preparing globally responsible teachers. In R.

Lewin (Ed.), The handbook of practice and research in study abroad (pp. 151–169). Routledge.

Cushner, K. (2011). Intercultural research in teacher education: An essential intersection in the

preparation of globally competent teachers. Action in Teacher Education, 33(5-6), 601–614. https://doi.org/10.1080/01626620.2011.627306

Cushner, K. (2012). Intercultural competency in teacher education: Developing the cognitive,

affective, and behavioral dimensions of intercultural competence. In D. K. Deardorff (Ed.), The SAGE handbook of intercultural competence (pp. 152–166). SAGE Publications.

Day, D., Harrison, M., & Halpin, S. (2009). An integrative approach to leader development:

Connecting adult development, identity, and expertise. Routledge.

Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student

outcome of internationalization. Journal of Studies in International Education, 10(3), 241–266. https://doi.org/10.1177/1028315306287002

Dunn, D. S., Dotson, K. W., Cross, C. B., Kesner, J. E., & Lundahl, J. K. (2014). The eye of the

beholder: How faculty and students construe the impact of study abroad experiences. International Research and Review, 4(1), 66–81.

Erikson, E. H. (1950). Childhood and society. W. W. Norton.

Hammer, M. R. (2011). The Intercultural Development Inventory (IDI): An assessment for

building cultural competence. In M. A. Moodian (Ed.), Contemporary leadership and intercultural competence (pp. 203–218). Sage Publications.

Hicks, T., & Berger, J. (2010). Learning to dance: How one organization used action inquiry to

cultivate adaptive agility. Action Learning: Research and Practice, 7(2), 169–186.

Hinojosa, R., Gardner, W. L., Walker, S., Cogliser, C. C., & Gullifor, K. (2017). The role of

cognitive and emotional dissonance in the development of transformational leadership. Journal of Leadership Studies, 11(4), 68–81.

Jones, S. R., Rowan-Kenyon, H., Ireland, S., Niehaus, E., & Skendall, K. (2012). The meaning

students make as participants in short-term immersion programs. Journal of College Student Development, 53(2), 201–220. https://doi.org/10.1353/csd.2012.0026

Kegan, R. (1982). The evolving self: Problem and process in human development. Harvard

University Press.

Kegan, R. (1994). In over our heads: The mental demands of modern life. Harvard University

Press.

Kegan, R., & Lahey, L. L. (2009). Immunity to change: How to overcome it and unlock the

potential in yourself and your organization. Harvard Business Press.

Kitchenham, A. (2008). Transformational learning in multicultural environments. Journal of

Transformative Education, 6(2), 104–116.

Kjellström, & Stålne, K. (2017). Adult Development as a Lens: Applications of Adult

Development Theories in Research. *Behavioral Development Bulletin*, *22*(2), 266–278.

https://doi.org/10.1037/bdb0000053

Loevinger, J. (1976). Ego development: Conceptions and theories. Jossey-Bass.

Major, J., Munday, A., & Winslade, J. (2020). Enhancing Intercultural Competence Through a

Hybrid Course Design. International Journal of Teaching and Learning in Higher Education, 32(1), 161–171.

Mezirow, J. (1978). Transformative dimensions of adult learning. Journal of Education, 160(3),

153–170.

Mezirow, J. (1991). Transformative dimensions of adult learning. Jossey-Bass.

Mezirow, J. (2000). Learning as transformation: Critical perspectives on a theory in progress.

Jossey-Bass.

Mitchell, T. D., & Paras, P. (2018). Community-based learning and critical reflection in teacher

education: Navigating tensions in theory and practice. Journal of Higher Education Outreach and Engagement, 22(1), 111–138.

Niehaus, E., & Crain, L. K. (2013). Act local or global?: Comparing student experiences in

domestic and international service-learning programs. Michigan Journal of Community Service Learning, 20(1), 31–40.

Paige, R. M., Jacobs-Cassuto, M., Yershova, Y. A., & DeJaeghere, J. (2006). Assessing

intercultural learning: The IDI. International Journal of Intercultural Relations, 30(4), 477–493.

Paras, B., Carignan, N., Brenner, D., Hardy, S., Malmgren, K., & Rathburn, M. (2019).

Integrating critical reflection and intercultural learning into a clinical immersion program. Advances in Medical Education and Practice, 10, 23–33.

Parkhouse, H., Tichnor-Wagner, A., Cain, J. M., & Glazier, J. (2016). Becoming globally

competent educators: A mixed methods study of preservice teachers’ intercultural development. The Teacher Educator, 51(4), 297–317.

Pederson, P. V. (1997, November). *Intercultural sensitivity and the early adolescent*. Paper

presented at the Annual Conference of the National Council for the Social Studies, Cincinnati, OH.

Piaget, J. (1950). The psychology of intelligence. Routledge.

Piaget, J. (1970). Science of education and the psychology of the child. Viking.

Raptis, P. R. (2019). The Role of First-Person Inquiry and Developmental Capacity on

Transforming Perspectives About Sustainable Development. The Journal of Transdisciplinary Research, 11(1), 60–74.

Rexeisen, R. J., Anderson, P. H., Lawton, L., & Hubbard, A. C. (2006). Study abroad and

intercultural development: A longitudinal study. Frontiers: The Interdisciplinary Journal of Study Abroad, 13, 1–20.

Ritz, C. (2011). Identity development in an international context: A phenomenological study of

student sojourners. Journal of College Student Development, 52(5), 555–574.

Rooke, D., & Torbert, W. R. (2005). Seven transformations of leadership. Harvard Business

Review, 83(4), 66–76.

Santoro, N. (2014). Developing teacher professionalism through international experience: Global

pathways for personal and professional learning. Teaching and Teacher Education, 39, 134–144.

Sharma, S., Phillion, J., & Malewski, P. (2011). Examining the development of intercultural

competence over the course of a teacher education program. Action in Teacher Education, 33(5-6), 615–630.

Torbert, W. R. (2004). Action inquiry: The secret of timely and transforming leadership. Berrett-

Koehler Publishers.